WHAT IS CLAIMED IS:

1. A method for cloning a plant promoter which in plants is natively located upstream of and controls the expression of a gene encoding a polypeptide having endo-xyloglucan transferase activity, comprising the steps of:

(1) completely digesting plant genomic DNA with one or more restriction enzymes;

(2) hybridizing the completely digested plant genomic DNA to a cDNA of a gene encoding a polypeptide having endo-xyloglucan transferase activity as a probe in a Southern hybridization to determine the size of hybridizing genomic DNA fragments;

(3) preparing a partial genomic DNA library using DNA fragments having approximately the same size as the genomic DNA fragments hybridizing to the cDNA probe in the hybridizing step (2);

(4) screening DNA fragments containing a promoter region by hybridization of the partial genomic DNA library with a cDNA of a gene encoding a polypeptide having endo-xyloglucan transferase activity as a probe; and

(5) identifying DNA fragments having promoter activity and cloning an isolated plant promoter, which in plants is natively located upstream of and controls the expression of a gene encoding a polypeptide having endo-xyloglucan transferase activity.

2. A method for cloning a plant promoter which in plants is natively located upstream of and controls the

expression of a gene encoding a polypeptide having endo-xyloglucan transferase activity, comprising the steps of:

(1) completely digesting plant genomic DNA into DNA fragments with one or more restriction enzymes;

(2) self-ligating the digested DNA fragments to obtain cyclic DNA molecules;

(3) amplifying promoter-containing DNA fragments of the cyclic DNA molecules by inverse PCR using the cyclic DNA molecules as template along with primers synthesized on the basis of the nucleotide sequence of a gene encoding a polypeptide having endo-xyloglucan transferase activity; and

(4) identifying amplified DNA fragments having promoter activity and cloning an isolated plant promoter, which in plants is natively located upstream of and controls the expression of a gene encoding a polypeptide having endo-xyloglucan transferase activity.

Sub B1

3. A method for controlling the morphology of a ~~plant~~, comprising transforming a plant with an isolated DNA molecule comprising a plant promoter ligated to a useful gene in a state capable of expressing the useful gene, wherein the plant promoter is natively located in plants upstream of and controls the expression of a gene encoding a polypeptide having endo-xyloglucan transferase activity.

Sub B

4. The method according to claim 3, wherein the isolated DNA molecule further comprises a vector sequence.

Sub B2

5. A method for controlling the transgenic plant morphology, comprising the steps of:

transforming a plant cell with an isolated DNA molecule comprising a plant promoter ligated to a useful gene in a state capable of expressing the useful gene, wherein the plant promoter is natively located in plants upstream of and controls the expression of a gene encoding a polypeptide having endo-xyloglucan transferase activity; and

regenerating a transgenic plant from the transformed plant cell.

6. The method according to claim 5, wherein the isolated DNA molecule further comprises a vector sequence.

7. A method for producing a recombinant protein in a plant, comprising the steps of:

transforming a plant with an isolated DNA molecule comprising a plant promoter ligated to a gene encoding a protein in a state capable of expressing the protein, wherein the plant promoter is natively located in plants upstream of and controls the expression of a gene encoding a polypeptide having endo-xyloglucan transferase activity;

expressing and producing the recombinant protein; and

recovering the expressed and produced recombinant protein.

8. The method according to claim 7, wherein the isolated DNA molecule further comprises a vector sequence.

9. A method for producing a recombinant protein from a plant cell, comprising the steps of:

transforming a plant cell with an isolated DNA molecule comprising a plant promoter ligated to a gene encoding a protein

in a state capable of expressing the protein, wherein the plant promoter is natively located in plants upstream of and controls the expression of a gene encoding a polypeptide having endo-xyloglucan transferase activity;

cultuivating the transformed plant cell to express and produce the recombinant protein; and

recovering the expressed and produced recombinant protein.

10. The method according to claim 9, wherein the isolated DNA molecule further comprises a vector sequence.

11. A method for producing a recombinant protein in a transgenic plant, comprising the steps of:

transforming a plant cell with an isolated DNA molecule comprising a plant promoter ligated to a gene encoding a protein in a state capable of expressing the protein, wherein the plant promoter is natively located in plants upstream of and controls the expression of a gene encoding a polypeptide having endo-xyloglucan transferase activity;

regenerating a transgenic plant from the transformed plant cell;

expressing and producing the recombinant protein in the transgenic plant; and

recovering the expressed and produced recombinant protein.

12. The method according to claim 11, wherein the isolated DNA molecule further comprises a vector sequence.